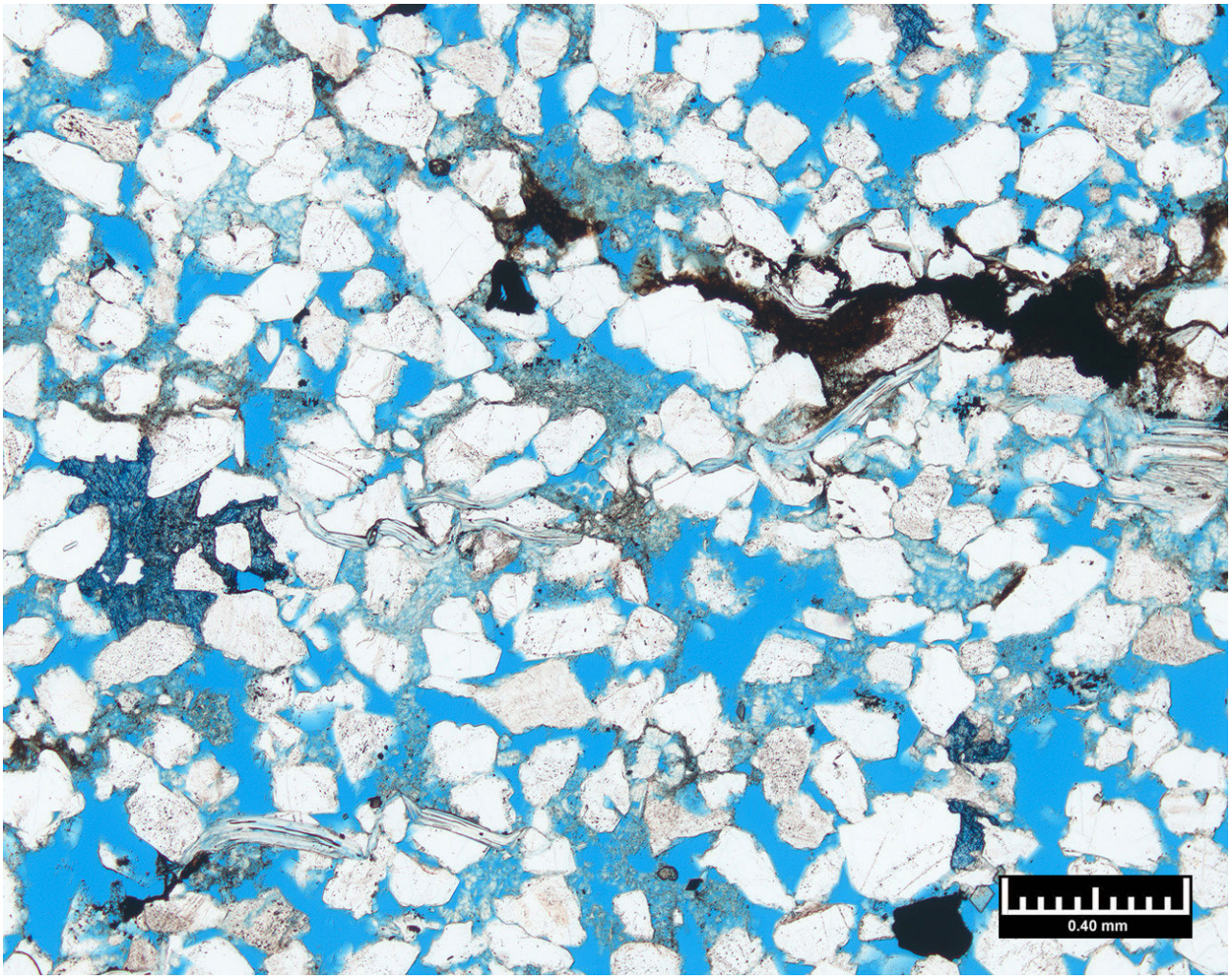

Figure 2-29 Thin section image from sandstone layer in the Tuscaloosa Formation (5,070 feet core depth) in the Louisiana Green Fuels Stratigraphic Test Well (La SN975841) (magnification 50x). This thin section image illustrates the petrologic and sedimentological characteristics that impart excellent reservoir quality to sandstones of the Tuscaloosa Formation. This XRD measurements for this sample indicate that it is dominate by detrital quartz (85.9 weight %) and contains very little clay (9.0 weight %). Visible intergranular and intragranular porosity is abundant throughout the sample. The measured porosity is 27.0%, and the corresponding air permeability is 694.0 mD (using conventional routine core analysis and a net confining stress of 1,900 psi). These measurements confirm that the abundant, large intergranular pores observed in thin sections from this clean sandstone are well connected and highly amenable to carbon dioxide injection.